

1 DIRECT TESTIMONY OF

2 NEVILLE O. LORICK

3 ON BEHALF OF

4 SOUTH CAROLINA ELECTRIC & GAS COMPANY

5 DOCKET NO. 2001-420-E

6
7 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION
8 WITH SOUTH CAROLINA ELECTRIC AND GAS COMPANY (SCE&G).

9 A. Neville O. Lorick, 1426 Main Street, Columbia, South
10 Carolina. My position is President and Chief
11 Operating Officer of South Carolina Electric & Gas
12 Company (SCE&G).

13 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
14 PROFESSIONAL EXPERIENCE.

15 A. I have a B.S. in Mechanical Engineering from The
16 University of South Carolina. I began my employment
17 with SCE&G in April 1971, as a student assistant and
18 was hired full time in January 1975, as an engineer.
19 In March 1978, I became the Assistant Plant Manager
20 for our Canadys Station Fossil Steam Plant and in
21 September 1982, was promoted to Plant Manager. In
22 July 1988, I was promoted to General Manager, Fossil
23 and Production Operations. In this position, I was
24 responsible for all of the Company's Fossil Fuel
25 Plants and the Fossil Production Corporate Staff. In

1 December 1992, with reorganization, my title was
2 changed to Manager of Production Support. In December
3 1994, I was named Manager of Operation Services and my
4 responsibilities included the management of Support
5 Staff and their interface with the Fossil/Hydro
6 Departments. In July 1995, I was promoted to the
7 position of Vice President of Fossil & Hydro
8 Operations. In December 2000, I was elected by the
9 SCANA Board of Directors to be President and Chief
10 Operating Officer of SCE&G.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

12 **A.** The purpose of my testimony is to provide to the
13 Commission an overview of the comprehensive planning
14 that the Company has undertaken in connection with the
15 proposed Jasper County Generation Project; to explain
16 to the Commission how we at SCE&G arrived at the
17 decision reflected in this application; and to discuss
18 why we believe this decision best addresses the needs
19 of the Company and our customers.

20 The decision of SCE&G is to build a combined-cycle
21 power plant on a rural site adjacent to the Savannah
22 River near Hardeeville in Jasper County, South
23 Carolina. The witnesses who will follow me will
24 discuss our planning process and provide our analysis
25 and support for each decision made.

1 Dr. Joseph Lynch will address our assessment of
2 the capacity need for electric power in the SCE&G
3 service area and why we believe the assessment is
4 correct. He will also discuss the financial and
5 economic reasoning that underlies the decisions we
6 have made regarding the construction of a new plant at
7 the Jasper County site.

8 Mr. Stephen M. Cunningham will describe the
9 production system and other infrastructure required to
10 support the plant and will discuss arrangements with
11 Duke-Flour Daniel for the engineering, procurement,
12 and construction of the project.

13 Finally, Mr. Jack Preston will explain the
14 environmental considerations involved with the Jasper
15 County plant site and affirm the Company's commitment
16 to protecting the environment.

17 Through this testimony we will demonstrate to the
18 Commission that our decision-making has been
19 consistently aimed at providing reliable, safe, high
20 quality, cost-effective power for the customers of
21 SCE&G. In all these considerations our decisions
22 reflect our best judgment.

23 **Q. PLEASE EXPLAIN TO THE COMMISSION HOW SCE&G INITIATED**
24 **THE PROCESS THAT LED TO THE DECISION FOR THE JASPER**
25 **COUNTY GENERATION PROJECT.**

1 A. Similar to the past processes with respect to
2 generation construction, our planning process emerged
3 from SCE&G's annual load and resource forecast. Based
4 on our projections of growth in peak demand on our
5 system after 2001, we anticipate the need for 254
6 megawatts of additional capacity by 2004 and 480
7 megawatts by 2006. These projections of need take
8 into account the capacity to be added to the system by
9 the Urquhart Re-powering Project and the upgrades to
10 the Fairfield Pumped Storage Plant.

11 We considered meeting this need for capacity by
12 adding two combustion turbines (CTs) of 150 megawatts
13 each in 2004 and a third CT in 2006. However, we found
14 that it was more economical to add the two CTs in a
15 combined-cycle configuration. This would add 459
16 megawatts to the system in 2004 and would produce
17 electricity more efficiently than in a simple cycle
18 configuration. Finally, we determined that if we
19 increased the scale of the combined-cycle plant by
20 using three CTs and supplementary duct-firing, then
21 the cost of incremental capacity would be about 60%
22 less than the cost of base capacity. We would not,
23 however, be comfortable adding that much total
24 capacity -- 875 megawatts -- in 2004 for our
25 territorial customers. Therefore, we arranged a firm,

1 long-term sale of 250 megawatts for nine years to
2 carry the cost of the incremental capacity until our
3 South Carolina customers need it. This process will
4 lock-in economy of scale benefits of the larger plant
5 for our native load customers. When we compared this
6 option to the other options available, it was clearly
7 the best choice for us and for our customers. Dr.
8 Lynch will present more of the details of these
9 comparisons and will discuss our reserve margin range
10 of 12% to 18%.

11 In short, the decision to build a plant in Jasper
12 County, using three combustion turbine generators in a
13 combined-cycle configuration yielding 875 megawatts of
14 capacity is a prudent solution for meeting our
15 customers' needs for economical and reliable energy.
16 The total project cost, excluding transmission system
17 improvements but including Allowance for Funds Used
18 During Construction (AFUDC), will be approximately
19 \$450,000,000.

20 **Q. MR. LORICK, WERE THERE ANY OTHER FACTORS THAT ENTERED**
21 **INTO THE DECISION-MAKING PROCESS?**

22 **A.** Yes, another important aspect of the decision-making
23 process relates to the availability and volume of
24 natural gas necessary for the operation of the

1 proposed combined-cycle turbine generators at the
2 Jasper County site.

3 **Q. WHAT FUEL WILL BE USED TO FIRE THE PROPOSED GAS TURBINE**
4 **UNITS AT THE JASPER COUNTY SITE?**

5 **A.** These units will burn natural gas as the primary fuel,
6 with distillate (No. 2) fuel oil as the secondary fuel.

7 **Q. HOW WILL NATURAL GAS BE SUPPLIED?**

8 **A.** The Jasper County plant site is located close to the
9 Savannah River near the point where SCG Pipeline, Inc.
10 (SCG), a recently formed SCANA subsidiary, is
11 developing plans for connecting to and receiving
12 natural gas from interstate pipelines and from the
13 liquefied natural gas (LNG) facility near Savannah,
14 Georgia. We will obtain our gas requirements via SCG.

15 **Q. WHAT VOLUMES OF NATURAL GAS WILL BE REQUIRED AND UNDER**
16 **WHAT CONTRACT TERMS?**

17 **A.** The plant would consume approximately 155,000
18 dekatherms (DT) of natural gas a day at 100% load
19 factor. The Company plans to contract with SCANA
20 Energy Marketing Inc. (SEMI) for 120,000 DT of firm
21 natural gas supply and to purchase the balance on an
22 interruptible basis. This will allow the units to be
23 available and utilized when our electric generation
24 economic dispatch model dictates their need.

1 Q. INTERRUPTIBLE NATURAL GAS IS NOT ALWAYS AVAILABLE. HOW
2 WILL THE PLANTS BE FIRED IF NATURAL GAS IS INTERRUPTED?

3 A. The peak period for electric usage occurs in the summer
4 when there is usually very little, if any, curtailment
5 of natural gas supply. We plan to have natural gas
6 available to burn at all times except during the severe
7 winter period. When natural gas is not available, we
8 will fire the units on distillate oil. The Company
9 will have oil storage tanks with 3.75 million gallons
10 capacity to supply these units.

11 Q. PLEASE DESCRIBE HOW THE PROPOSED JASPER COUNTY
12 GENERATING FACILITY WILL BE CONNECTED TO THE GRID.

13 A. Electricity generated by the plant will be delivered to
14 our customers by 230kV lines currently being designed
15 by Company personnel. Additionally, we are planning
16 interconnections from the substation on-site to the
17 Santee Cooper and Southern Company systems. SCE&G will
18 seek siting certification from the Commission for the
19 new transmission lines for this generating project
20 under a separate filing at the appropriate time.

21 Q. MR. LORICK, DO YOU HAVE ANY OTHER COMMENTS TO MAKE TO
22 THE COMMISSION?

23 A. Yes. All of the factors which I have discussed were
24 measured and carefully evaluated by SCE&G's senior
25 management, and this process resulted in a

1 recommendation to proceed with the proposed Jasper
2 County Generation Project. Senior Staff carried this
3 recommendation to the SCANA Board of Directors, and the
4 Board accepted the President's recommendation. Now the
5 Company is before the Commission respectfully seeking
6 approval for siting certification for that project.

7 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

8 **A.** Yes, it does.